



An Operational Tester's Perspective on how Distributed T&E fits the Vision for Testing in the New Decade

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Bill McCarthy
Deputy Director
Net-centric & Space Systems/Missile Defense
OSD-DOT&E

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L/V/C – The Operational Tester's Perspective

- We must do it –
 - Time
 - Money
 - Security
 - Realism



Where are we Today?

- Some successes –
 - DJC2
 - PATRIOT
 - EA-18G
- Some work in progress –
 - DCGS-FOS
 - Ballistic Missile Defense System
 - CVN-21/*Gerald Ford*
 - GPS Enterprise
- Some areas still largely untouched



Why haven't we made more progress?

- The same factors (perceptions) are in play –
 - Time
 - We don't have time to build models, we are trying to produce something real
 - We need the final results before we spend money building models
 - Money
 - See above – (time is \$)
 - Security
 - It takes too long to get the security agreements in place (if ever)
 - Realism
 - You will never build a model that is sufficiently realistic...
- On top of that, it is hard!
 - Phenomenology, lethality, environmental and communications models are essential yet they are also technically challenging and frequently lack sponsorship.



Why will things be different this time?

- The four imperatives grow increasingly strong –
 - Missile Defense
 - GPS Enterprise
 - Space systems
- Technology has improved the art of the possible
- We have amassed a wealth of experience over the last 3 years –
 - Projects such as the Joint IO Range have transitioned from demonstration to operation
- Investments are beginning to produce tangible results
 - Sandia National Lab experiment in conjunction with USAF program of record is examining the potential on a network system
 - Information Assurance Range participation in *Bulwark Defender 10*
- We are building stronger partnerships with the Developmental Test Community- much L/V/C work is “operationally realistic developmental testing”



Some Thoughts...

- Focus where the need is greatest...
 - Information Assurance/Defense of Networked Systems
 - Next generation command & control systems – such as the follow-on to the GCCS-FOS (Human Systems Engineering)
 - Ballistic Missile Defense Systems
 - Lethality
- Invest in the tools required to provide the data needed for rigorous analysis.
- Continue with small steps that build increasing capability (“Big Bang” approaches are too often obsolete when delivered.)
- Don’t let enthusiastic supporters over-promise.
- Experiment!